

REMARKS/ARGUMENTS

Applicants gratefully acknowledge the allowance of claims 20-23 and the further indication that claim 13 contains allowable subject matter. By this Amendment, claim 13 has been rewritten in independent form, thereby placing the claims in condition for allowance.

The Examiner has rejected claims 1-12, 14-19 and 24 under 35 U.S.C. § 103 as unpatentable over Kaminski in view of Calfee. The Examiner continues to take the position that it would have been obvious to one of ordinary skill in the art to modify Kaminski by constructing the enclosure rings of the primary reference with a lamina composite that includes at least two layers selected from the group consisting essentially of metals, glass fiber laminates and graphite fiber laminates as taught by Calfee.

The propriety of the Examiner's rejection is directly related to the scope of the Calfee disclosure. In responding to applicants' previously submitted arguments, the Examiner takes the position that Calfee never indicates that the lamina composite disclosed therein only works with flat plates. In this regard, the Examiner points to Figures 4b and 4c of the reference and concludes that the lamina composite "can work in hoop direction." In fact, Figures 4b and 4c in Calfee merely illustrate a test procedure for flat laminates plates or panels. For flat laminar constructions (see column 2, line 67) that are fabricated from metal foil layers 11, glass fiber layers 12, graphite fiber layers 13, and corrugated metal foil layers 14. Accordingly to lines 48-51 in column 4, Calfee explains that

In Fig. 4(b), the specimen 32 is flexed with a tension side up and kept in place by tension bolts 32. Impact occurs on the tension side. The reverse is true in Fig. 4(c).

Clearly, Figures 4b and 4c show the specimen as a flat beam or panel that is prestressed to give camber (curvature). The curvature is small and the sketch greatly exaggerates the amount

of curvature. In any event, the curvature is not "built-in" but is rather forced under stress with the tension bolts holding it in place. Such small curvature in a prestressed flat beam is not even remotely similar to a full annular ring as described in the present application. Moreover, preloading and testing with the tension side up or with tension down has no bearing or relevance to the hoop strength of annular rings. Further in this regard, by the very nature of corrugations, it would be readily apparent to one of ordinary skill in the art that the metal foil corrugations will only work with unidirectional fiber placement. Clearly, the patent relates to flat plates or panels in general and never alludes to a body of revolution component as found in annular rings.

Further in this regard, the Examiner's statement that Calfee does not expressly exclude applicability to annular rings is clearly an attempt to avoid the burden of establishing prima facie obviousness that lies initially with the U.S. Patent and Trademark Office. In other words, applicants are not required to establish by proof that the disclosure in a patent is not applicable to areas not within the four corners of the reference as interpreted by one of ordinary skill in the art. It is therefore respectfully submitted that the combination of Kaminski and Calfee is insufficient to establish prima facie obviousness with respect to any of claims 1-12, 14-19 and 24.

With further regard to claims 6-11, 16, 19 and 24, the Examiner readily acknowledges that the combination of references fails to disclose the specific arrangement of layers as described in those claims. For this additional reason, the rejection of these claims is also improper and should be withdrawn.

The application is now in condition for allowance and early passage to issue is requested.

Should any small matters remain outstanding, the Examiner is encouraged to telephone the undersigned so that the prosecution of this application can be expeditiously concluded.

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Respectfully submitted,

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By:

A handwritten signature in black ink, appearing to read "Michael J. Keenan", written over a horizontal line.

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